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APPLICATION N	O.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/716,775		11/19/2003	Lawrence E. Renck	031599/259282	6154	
826	7590	10/05/2005		EXAM	INER	
ALSTO	N & BIR	& BIRD LLP		HORTON, YVO	HORTON, YVONNE MICHELE	
		MERICA PLAZA				
		ON STREET, SUITE 40	000	ART UNIT	PAPER NUMBER	
CHARLO	CHARLOTTE, NC 28280-4000			3635	•	
				DATE MAILED: 10/05/2005	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/716,775	RENCK, LAWRENCE E.
Office Action Summary	Examiner	Art Unit
	Yvonne M. Horton	3635
The MAILING DATE of this communication a priod for Reply	appears on the cover sheet w	vith the correspondence address -
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perion of the period for reply will, by state Any reply received by the Office later than three months after the material earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN.  1.136(a). In no event, however, may a  od will apply and will expire SIX (6) MO  tute, cause the application to become A	ICATION.  reply be timely filed  NTHS from the mailing date of this communication.
atus		
1) Responsive to communication(s) filed on 19	November 2003	
	his action is non-final.	
3) Since this application is in condition for allow		there prosecution as to the marite in
closed in accordance with the practice under	r Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.
sposition of Claims		
4)⊠ Claim(s) <u>1-36</u> is/are pending in the application		
4a) Of the above claim(s) is/are withdo	rawn from consideration.	•
5) Claim(s) is/are allowed.	001/	
6) Claim(s) 1-10,12-15,17-21,25-28,30-34 and		
7) Claim(s) 11,16,22-24,29 and 35 is/are object		
8) Claim(s) are subject to restriction and	ivor election requirement.	
plication Papers		
9) The specification is objected to by the Examin		
10) $igtie$ The drawing(s) filed on 19 November 2003 is	s/are: a) accepted or b)	objected to by the Examiner.
Applicant may not request that any objection to the	ne drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the corre	ection is required if the drawing	g(s) is objected to. See 37 CFR 1.121(d)
11) The oath or declaration is objected to by the I	Examiner. Note the attache	d Office Action or form PTO-152.
ority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign	gn priority under 35 U.S.C. {	§ 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority docume		
2. Certified copies of the priority docume	nts have been received in A	Application No
<ol><li>Copies of the certified copies of the pri</li></ol>	iority documents have been	received in this National Stage
application from the International Bure	au (PCT Rule 17.2(a)).	•
* See the attached detailed Office action for a lis	st of the certified copies not	received.
Chment(s)		
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview S	Summary (PTO-413) s)/Mail Date
✓ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08	8) 5) Notice of I	nformal Patent Application (PTO-152)
Paper No(s)/Mail Date <u>2/22/05</u> .	6)  Other:	
tent and Trademark Office		

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

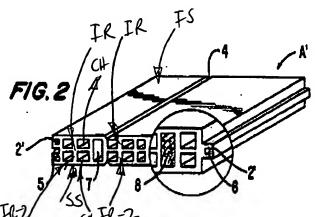
Claims 1,7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #3,709,161 to KAUFFMAN. KAUFFMAN discloses the use of a reinforced panel including a face sheet (8,10,12) with a plurality of integral intersecting ribs (4,6) projecting from an interior side thereof and forming contiguous cells/channels, column 2, lines 39-43 and reinforcing members (16) positioned within the channels to increase bending resistance of the panel, column 2, lines 47-49. Regarding claims 7 and 8, the face sheet (8,10,12) is made from papermaking fibers, column 2, line 13, and is attached to the distal ends of the ribs (4,6).

Claims 1,2-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #5,876,831 to RAWAL. RAWAL discloses the use of a reinforced panel (10) including a face sheet (34,40) with a plurality of integral intersecting ribs (22a-e) projecting from an interior side thereof and forming contiguous cells/channels, and reinforcing members (18a-e) positioned within the channels to increase bending resistance of the panel. Regarding claims 2,4,5 and 6, the reinforcing member (18a-e) and the cells/channels have a cross-sectional shape of a polygon or a circle, see figures 2 and 4; wherein the reinforcing members (18a-e) are adhesively, column 5, line 25,

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bonding within the cells/channels. In reference to claim 8, the face sheet (34,40) is attached to the distal ends of the ribs (22a-e).

Claims 1,3,9,10,12-15 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #5,177,924 to KAKUK. KAKUK discloses the use of a reinforced panel including a face sheet (FS) with a plurality of integral intersecting ribs (IR) projecting from an interior side thereof and forming contiguous cells/channels (2,7,10) and reinforcing members (3,8,11,21) positioned within the channels to increase bending resistance of the panel, see below. Regarding claims 3 and 12, the reinforcing



members (21) have an I-shape. In reference to claims 9 and 20, the members are molded fibers, column 5, lines 1-19. Further regarding claim 10, the panel also includes a second face (SS) and a plurality of second intersecting ribs (IR-2) that are in face to face contact with the first integral ribs (IR), see above. In reference to claims 13-15, the first and second reinforcing members (18a-e) are positioned within the first and second channels (22a-e), flush therewith, and are bonded therein by glue/adhesive, column 6, lines 19-22. Regarding claim 18, the planar sheet (FS,SS) are attached to the distal ends of the intersecting members (18a-e). In reference to claim 19, the

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reinforcing members (18a-e) are made from metal or wood, column 6, lines 41,49 and 56.

Claims 21,25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #5,876,831 to RAWAL. RAWAL discloses the method of forming a reinforcing panel including the steps of forming a first face sheet (34,40), forming first channel (22a-e), and securing a first reinforcing member (18a-e). Regarding claim 25, the reinforcing member (18a-e) is secured using adhesive, column 6, lines 19-22. In reference to claim 27, the reinforcing members (18a-e) fit flush within the channels (22a-e).

Claims 21,26,28,30-34 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #5,177,924 to KAKUK. Regarding claims 21 and 32KAKUK discloses the method of forming a reinforcing panel including the steps of forming a first face sheet (FS), forming first channel (CH) and (2,7,10) using a plurality if integral ribs (IR), and securing a first reinforcing member (3,8,11,21) therein, see above. In reference to claim 26, the securing step includes securing the first reinforcing member (21) beyond the first integral ribs (IR), see figures 6 and 7. Regarding claims 28 and 31, RAWAL further discloses the step of forming a second face (SS) and second integral ribs (IS-2), and channels (CH-2) and (2,7,10); and securing a first and second reinforcing member (21) in a second channel thereby attaching the first sheet (FS) to the second sheet (SS). In reference to claim 30, RAWAL further discloses securing the second reinforcing members (2,7,10) within the second channels (3,8,11). Regarding claim 32, RAWAL further discloses the use of a channel (4) on the exterior side of the

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face sheet (FS). In reference to claim 33, the first (IR) and second (IR-2) intersecting ribs are proximate one another. Regarding claim 34, the channel (4) extends into the exterior of the face sheet (FS). In reference to claim 36, the face sheet (FS,SS) is formed from molded fibers, column 5, lines 1-19.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over US

Patent #5,177,924 to RAWAL. RAWAL discloses the basic claimed panel except for
explicitly detailing the use of a paper board material. Although RAWAL is silent in this
regard, he does detail the use of organic materials, column 1, line 51. Paper is an
organic material. Thus, it would have been obvious to one having ordinary skill in the
art at the time the invention was made to select a known material on the basis of its
suitability for the use intended as an obvious matter of design choice.

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## Allowable Subject Matter

Claims 11,16,22-24,29 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (571) 272-6845. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yvonnel M. Horton Art Unit 3635 10/3/05